DOCUMENT RESUME

ED 055 255 AC 010 554

AUTHOR Dillman, Don A.; And Others
TITLE Voluntary Associations and Community Structure.
PUB DATE 67
NOTE 25p.; See Rural Sociology Report 42, Ames: Iowa State Univ., 1967, for more complete description of study

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Community Characteristics; *Data Analysis; *Group Membership; Networks; Social Relations; *Voluntary Agencies

ABSTRACT

This study examined overlapping membership of voluntary associations as the basis of a statistical technique for analyzing community structure. An underlying assumption was that organizations select certain membership linkages in preference to others within a community. Thus one would expect to find points of integration and cleavage among community organizations. The data was collected in a community of 5,000 persons, and 41 organizations met the criteria of the researchers for inclusion in the study. Analysis of the data resulted in discriminating three percentage overlap clusters of organizations interrelated primarily because of their large size. Selectivity analysis of this data included eleven additional organizations not in the percentage overlap clusters. Four selectivity clusters were delineated in this community; 16 organizations were not in any selectivity clusters and one organization, which had many selectivity linkages, did not cluster and was defined as a mediating organization. A selectivity Consistency Index was constructed which indicated a relatively homogeneous selectivity pattern of within and between selectivity clusters in the community. These findings suggest selectivity analysis as a useful technique in defining structural interrelationships among organizations. (Author)

AC010554

8/25/71

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED055255

VOLUNTARY ASSOCIATIONS AND COMMUNITY STRUCTURE[1]

Don A. Dillman
Department of Rural Sociology
Washington State University
Pullman, Washington

Gerald E. Klonglan
Department of Sociology and Anthropology
Iowa State University
Ames, Iowa

Paul Yarbrough
Department of Sociology and Anthropology
Iowa State University
Ames, Iowa

Paul F. Schmitz
Department of Sociology and Anthropology
Iowa State University
Ames, Iowa

[1]For a more complete description of this study see: Beal, George M., Gerald E. Klonglan, Paul Yarbrough, Joe M. Bohlen and Don A. Dillman. Systems Linkages Among Woman's Organizations. Rural Sociology Report No. 42. Ames: Iowa State University. 1967.

AC 010 554

ABSTRACT

This study examined overlapping membership of voluntary associations as the basis of a statistical technique for analyzing community structure. An underlying assumption was that organizations select certain membership linkages in preference to others within a community. Thus one would expect to find points of integration and cleavage among community organizations. The data was collected in a community of 5000 persons and forty-one organizations met the criteria of the researchers for inclusion in the study.

Analysis of the data resulted in discriminating three percentage overlap clusters of organizations interrelated primarily because of their large size. Selectivity analysis of this data included eleven additional organizations not in the percentage overlap clusters. Four selectivity clusters were delineated in this community. Sixteen organizations were not in any selectivity clusters and one organization, which had many selectivity linkages, did not cluster and was defined as a mediating organization. A Selectivity Consistency Index was constructed which indicated a relatively homogeneous selectivity pattern of within and between selectivity clusters in the community. These findings suggest selectivity analysis as a useful technique in defining structural interrelationships among organizations.

VOLUNTARY ASSOCIATIONS AND COMMUNITY STRUCTURE

Voluntary asscciations have often been the subject of sociological study. In past research four general approaches to their study may be distinguished. The most common has been studies of individual participation (Bushee, 1945; Scott, 1957; Wright and Hyman, 1958; Hausknecht, 1962; and Rose, 1965). Studies of this nature have sought to describe patterns of participation and characteristics of the "joiner". They have been instrumental in dispelling the notion that all or even most Americans belong to and participate in these types of organizations. A second approach has viewed voluntary associations as functional structures in society (deTochqueville, 1945; Handlin, 1954; Rose, 1965; and Pennock and Chapman, 1969). The exact role of voluntary associations in prompting and maintaining a pluralistic society, however, has been only partially identified. In a third approach, the association has been the unit of analysis and focus placed on analysis of organizational structures and processes (Gordon and Babchuck, 1959; Warner and Hilander, 1964; Gusfield, 1965; and Warriner and Prather, 1965). Through this approach, voluntary associations are only one of many types of organizations which have contributed to the general theory of formal organizations. The fourth approach has examined locality based associations as elements of community structure (Jehlik and Wakeley, 1949; Young and Larson, 1965; Miller, 1953; Goodchilds and Hardin, 1960; and Laskin, 1962). The present analysis follows this latter tradition.

This study is directed towards understanding the relationships which exist between organizations in a common social environment, i.e., a local community. More specifically it is a study of a special type of structural relationship existing between organizations within a community, that of structural system linkage. These structural linkages are formed by the overlapping organizational memberships of individuals.

Our purpose is to examine overlapping membership (membership linkages) as a basis of technique for analyzing community structures and processes. If certain organizations are found to be linked together by overlapping memberships, but not similarly linked to other organizations in the same community, the resultant groupings of organizations may be interpreted as sociologically meaningful units of the community structure; meaningful because they are composed of on-going groups with an action potential for that segment of the community structure.

Several sociologists have suggested the importance of structural membership linkages in understanding community process. Warren (1963: 48-49) and Moe (1959) suggest communities can be viewed as a system of systems. These systems (e.g., voluntary associations) are not rationally and deliberately related to each other in a centralized fashion, but to the extent they function in a complementary or cooperative fashion, a viable community exists. These cooperative interrelationships define points of integration and cleavage in the structure of the community. Coser (1956) points out that multiple group affiliations of individuals lessen the seriousness of the threat of conflict to the encompassing social system. Coleman (1957) and Blau and Scott (1962: 199) have argued

that in the absence of overlapping memberships among organizations, "...conflicts tend to split a community into two hostile camps with little communication between them". Similarly, Rose (1954) observed that serious conflicts between voluntary organizations occur when there are no overlapping memberships. Hay and Polson (1951) emphasized the community process of cooperation when they hypothesized that participation of individuals in several organizations encourages working relationships among them. Overlapping memberships may also function as potential lines of communication and influence among organizations (Beal, et al., 1967).

The number of membership linkages that exist between two organizations may be viewed as a function of three analytical factors: 1) organization size, 2) membership activity (number of memberships per member), and 3) interorganizational selectivity in the distribution of membership linkages, i.e., the choosing of certain membership linkages in preference to others. The first two factors identify the necessary conditions for the existence of linkages. Their product equals the number of linkages a given organization shares with others in the community. However, the manner in which linkages are distributed, and thus the number that exist between any two organizations (to the extent of their occurrence is not random) is due to selectivity factors such as membership requirements and social stratification processes. Sociologically, the study of selectivity phenomena among the voluntary organizations of a community provides a basis for examining the structuring of relationships in a

community since selectivity reveals points of cleavage and integration among this one set of important sub-systems.

One of the few direct attempts to analyze the patterns of linkages in a community was that of Young and Larson (1965). Using an arbitrary criterion of 25 percent of the smaller organization's members having membership in the larger, they found that organizations tended to cluster into meaningful cliques. On this basis they delineated ten different subcommunities closely tied to neighborhood residence and for which differing degrees of community identification appeared to exist.

The type of selectivity analysis proposed complements and extends Young and Larson's efforts. In the present analysis the effects of organization size and membership activity are statistically controlled so that selectivity may be examined as an isolated variable. Selectivity data are compared with a percentage overlap matrix (similar to that used by Young and Larson) in an effort to present a more comprehensive view of the contribution of voluntary associations to community structure.

The Data

The data analyzed were collected in 1962 from a population of adult women's, non-religious, formal, voluntary organizations in Prairie City[2] an Iowa county seat town of approximately 5,000 persons (Beal et al., 1964; and Bohlen et al., 1964). The population of organizations was

defined to include those which had: 1) a fairly distinct set of objectives which in most cases was codified in a constitution, 2) a recognized and accepted name, 3) a definite membership which continued over time, 4) regular meetings held for the entire membership at least once a year, 5) planned programs and activities, 6) formal officers, 7) a degree of permanence, and 8) an organization and operational base within the incorporated limits of Prairie City.

Forty-one organizations met the criteria and membership lists were obtained from all but three, Farm Bureau Women, Parent Teachers Association and Newcommers Club. Two additional organizations, Woman's Society for Christian Service (Methodist Women) and Catholic Women, obviously did not meet the criterion of being non-religious but were added by the researchers because they were perceived to represent a major segment[3] of the local populace (Beal, et al., 1967). A third group--Wives of Influentials--is a fictitious organization. It is included because of its assumed value in producing further insights into the social structure of the community. Twenty-three of 25 women in this "group" were wives of men identified as influentials in a reputational power study of the same community (Bohlen et al., 1964), the other two women were designated as influentials in this power study. The addition of these three units resulted in 41 "organizations" being included in the analysis.

The Analysis

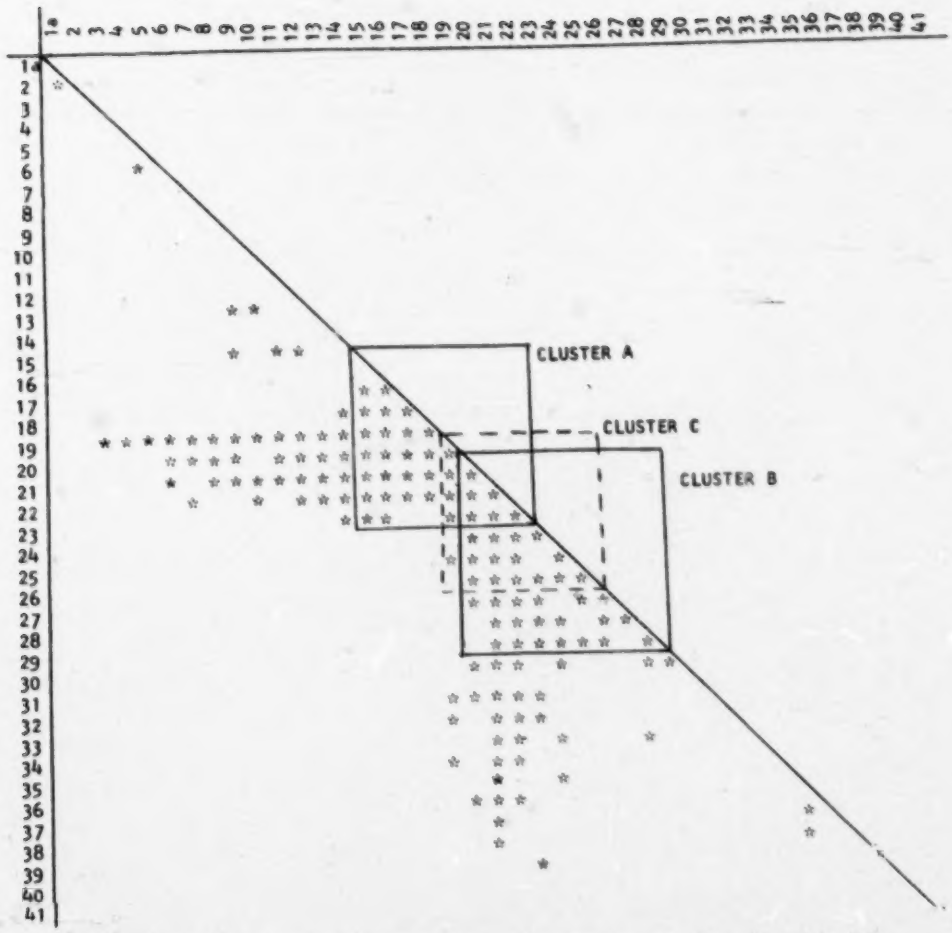
A percentage membership overlap matrix was constructed to identify clusters of organizations (Figure 1). All cases in which the smaller

of any two organizations had at least 20 percent of its members with membership in the larger one are indicated by an asterisk. This level of membership overlap occurred in 141 (17.2 percent) of a possible 820 instances. Following in large part a method of identifying clusters of sociometric choices developed by Forsyth and Katz (1946) and elaborated by Katz (1947) the distance of all asterisks from the matrix diagonal has been minimized. A general arbitrary criterion was set for delineation of clusters. It specified that any single organization should have a 20 percent overlap with all other organizations in the cluster, however, if the criterion was not met in no more than two exceptions per organization, the association was included in the cluster.

These procedures resulted in two major Clusters (A and B) being delineated (Figure 1). Cluster A had nine organizations and Cluster B ten. Four organizations (Nos. 20, 21, 22 and 23) were included in both. A third cluster (C) could be delineated which was composed of the four organizations in both Clusters A and B, plus one additional organization from Cluster A and three from Cluster B.

(Figure 1 about here)

It might be concluded from the percentage overlap matrix that Prairie City has a well integrated social structure as articulated through formal voluntary associations. However, it appears that size is a major factor in determining whether organizations are included in one or more clusters (Table 1). For example, the four organizations included in each of the three clusters are among the six largest and



Identification Numbers, Names and Sizes of Prairie City Organizations

Cluster A

15 AAUS (51)[c]
16 As You Like It (22)
17 Wives of Influentials (25)
18 P.E.O. (43)
19 [b]Country Club (228)
20 [b]Hospital Auxiliary (233)
21 [b]Methodist Women (286)
22 [b]Woman's Club (178)
23 [b]American Leg. Aux. (121)

Cluster B

20 [b]Hospital Auxiliary (233)
21 [b]Methodist Women (286)
22 [b]Woman's Club (178)
23 [b]American Leg. Aux. (121)
24 [b]Cemetery Aid (129)
25 [b]Eastern Star (83)
26 [b]D.A.R. (26)
27 E.C.D. (24)
28 Temperance Union (71)
29 Past Matrons (24)

Cluster C

19 [b]Country Club (228)
20 [b]Hospital Auxiliary (233)
21 [b]Methodist Women (286)
22 [b]Woman's Club (178)
23 [b]American Leg. Aux. (121)
24 [b]Cemetery Aid (129)
25 [b]Eastern Star (83)
26 [b]D.A.R. (26)

Non-Cluster Organizations

9 Child Guidance (20)
12 Parental Guidance (19)
5 Catholic Women (94)
7 Democratic Women (28)
6 Cradles to Careers (14)
2 Diapers to Denims (18)
10 Treble Clef (34)
8 Acorns to Oaks (18)
1 Beta Sigma Phi (23)
32 Business & Pro. Women (26)
39 V.F.W. Auxiliary (46)
33 Help One Another (32)
13 T.T.T. (12)
14 Child Study Club (18)
3 Know Your Child (19)
11 Child Management (17)
37 Good Luck Club (23)
34 Child Development (19)
38 Toddlers to Teens (11)
36 Toastmistresses (8)
31 Mothers' Club (20)
41 Gold Star Mothers (23)
35 Rebekahs (104)
40 D.A.V. Auxiliary (36)
30 Garden Club (34)
4 Teachers' Association (50)

Figure 1. Instances of 20 percent of the smaller organizations memberships overlapping with the larger among 41 Prairie City organizations

[a]Organization identification number

[b]Organizations in more than one cluster

[c]Number of members

their average size is nearly seven times larger than the average for

(Table 1 about here)

non-cluster organizations. But, it is likely that very large organizations are less effective in providing functional linkages among subsystems in a community than are smaller organizations. Warner and Hilander (1964) and Beal et al., (1967) found that members of large organizations on an average are less loyal to their organizations than members of smaller organizations. They concluded that members of large organizations exhibit less cohesion than members of smaller organizations. Large organizations are more likely to be composed of social cliques upon which social interaction is in large part based. Thus, the large organizations that appear to integrate the social structure of a community may simply provide a social setting in which persons from distinct elements of the community may share membership but carry on only minimal social interaction outside of their own cliques.

A second technique for the analysis of overlapping memberships is interorganizational selectivity which is based on presumed preferences in the selection of memberships. Proceeding from assumptions outlined below, selectivity analysis has as its objective to provide insight into whether significant social cleavages exist among organizations within a single community.

The analysis of interorganizational selectivity takes as a working assumption that there is a finite population of organizations in a community. In a situation of interorganizational non-selectivity, membership

Table 1. Size of organizations in 20 percent membership overlap matrix, by cluster

Organization Cluster	Number of Organizations	Organization Size	
		Range	Mean
Cluster A	9	22-286	132
Cluster B	10	24-286	118
Cluster C	8	26-286	161
Organizations included in all clusters	4	121-286	207
All non-cluster organizations	26	8-104	30

linkages (organization size x membership activity) are distributed among all organizations in proportion to the percent of linkages in the community held by any given organizations. The expected number of linkages between organizations A and B under this condition of complete non-selectivity (E_{AB}) is determined as follows:

$$E_{AB} = \frac{L_A \times L_B}{L_T - \frac{L_A + L_B}{2}}$$

where L_A and L_B are the total number of actual linkages shared with all organizations by A and B respectively, and L_T is the total linkages of all organizations in the population. The quantity $(\frac{L_A + L_B}{2})$ is an approximate correction factor introduced because an organization is assumed to be unable to share its linkages with itself.

Subtracting the expected number of membership linkages (E_{AB}) from the number that actually exists (A_{AB}) gives the direction and amount of deviation (D_{AB}) of the actual value from the expected value ($D_{AB} = A_{AB} - E_{AB}$). This value is the difference (direction specified) between the number of linkages that exist between two organizations and the number that would exist under a condition of complete non-selectivity.[4] A specific D_{AB} value may perhaps be due to certain random processes or be accounted for by preferences or aversions to membership in one organization by members in the other. If, however, identifiable patterns of relatively large deviations exist, then we should have somewhat greater confidence that random processes do not account for all deviations.

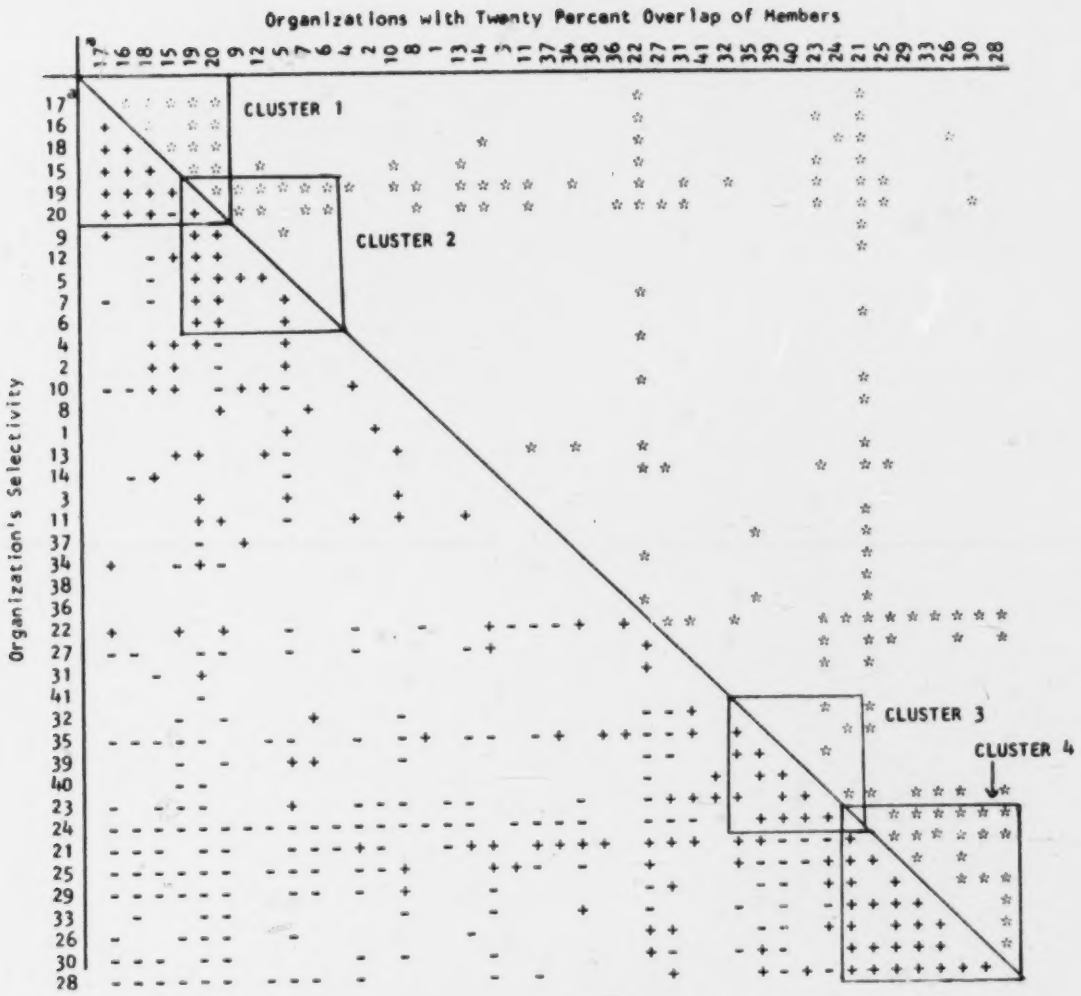
To determine whether patterns could be discerned, the matrix method introduced in the percentage overlap analysis was used for ordering selectivity data. All cases are plotted in which there was a positive deviation of one membership linkage from the expected value (Figure 2). An arbitrary criterion was set for delineation of clusters which specified that a cluster consisted of all organizations which exhibit positive selectivity for all organizations in that cluster. Two exceptions to this criterion were permissible: 1) an absence of selectivity (indicated by blank spaces) by any organization for no more than two organizations in that cluster or 2) negative selectivity by any organization for no more than one organization in that cluster.

(Figure 2 about here)

Four clusters were identified.[5] Selectivity Clusters 1 and 4 corresponded fairly closely to percentage overlap Clusters A and B, respectively. However, selectivity Clusters 2 and 3 were composed primarily of organizations not included in the percentage overlap clusters. In total, eleven organizations in the selectivity clusters were not included in any of the percentage overlap clusters.

(Table 2 about here)

A further comparison of the selectivity and percentage overlap analyses indicated that three of the four organizations included in all percentage overlap clusters show a clear identification with certain selectivity sets and repulsion toward others. Methodist Women (21), a member of selectivity Cluster 4, shows consistent negative selectivity



Identification Number, Names and Sizes of Prairie City Organizations

Cluster 1[c]

17 Wives of Influentials (25)
16 As You Like It (22)
18 P.E.O. (43)
15 AAUW (51)
19 [b]Country Club (228)
20 [b]Hospital Auxiliary (233)

Cluster 2

19 [b]Country Club (228)
20 [b]Hospital Auxiliary (233)
9 Child Guidance (20)
12 Parental Guidance (19)
5 Catholic Women (94)
7 Democractic Women (28)
6 Cradles to Careers (14)

Cluster 3

32 Business & Pro. Women (26)
35 Rebekahs (104)
39 V.F.W. Auxiliary (46)
40 D.A.V. Auxiliary (36)
23 American Leg. Aux. (121)
24 [b]Cemetery Aid (129)

Cluster 4

24 [b]Cemetery Aid (129)
21 Methodist Women (286)
25 Eastern Star (83)
29 Past Matrons (24)
33 Help One Another (32)
26 D.A.R. (26)
30 Garden Club (34)
28 Temperance Union (71)

Other

4 Teachers' Association (50)
2 Diapers to Denims (18)
10 Treble Clef (34)
8 Acorns to Oaks (18)
1 Beta Sigma Phi (23)
13 T.T.T. (12)
14 Child Study Club (18)
3 Know Your Child (19)
11 Child Management (17)
37 Good Luck Club (23)
34 Child Development (19)
38 Toddlers to Teens (11)
36 Toastmistresses (8)
22 Women's Club (178)
27 E.C.D. (24)
31 Mothers' Club (20)
41 Gold Star Mothers (23)

Figure 2. Comparison between organization's positive and negative selectivity with the percentage overlap matrix among 41 Prairie City organizations: positive (+) or negative (-) signs refer to organization's selectivity; asterisks (*) signify instances of percentage overlap

[a]Organization identification number

[b]Organization in more than one cluster

Table 2. Comparison between selectivity cluster organizations and their presence in percentage clusters

Percentage Clusters and their Overlaps	Selectivity Clusters				
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Total
Cluster A	4	-	-	-	4
Cluster AB	1	1	-	-	2
Cluster ABC	1	1	1	1	4
Cluster BC	-	-	1	3	4
Cluster C	-	-	-	2	2
Not in any cluster	-	5	4	2	11
TOTAL	6	7	6	8	27[a]

[a]The total number of organizations included in the four selectivity clusters was 24. The total 27 is due to the presence of three organizations in two clusters.

towards Clusters 1 and 2. Hospital Auxiliary (20), a member of Clusters 1 and 2, shows consistent negative selectivity towards Clusters 3 and 4. American Legion Auxiliary (23), a member of Cluster 3, shows consistently negative selectivity towards Clusters 1 and 2 but is inconsistent with respect to Cluster 4. A fourth organization, Woman's Club (22) is not a member of any selectivity cluster but exhibits selectivity in a somewhat random fashion to 17 of 24 clustered organizations. It is suggested that Woman's Club may be performing a mediating function among the various subsystems in the community.

Sixteen organizations did not exhibit sufficient selectivity to be clustered, nor the possibility of performing a mediating function and were defined as "Isolates". In general, the "Isolate" organizations have fewer members and are primarily "mother's clubs".

The selectivity clusters can be considered as units of analysis, and inter-cluster comparisons made with respect to their attraction and/or repulsion for one another. A visual comparison between Clusters 1 and 4 reveals a consistent negative selectivity exhibited by organizations of each cluster to organizations of the other. Cluster 1 is similarly negative towards Cluster 3 and Cluster 2 is negative towards Cluster 4 (Figure 1). In contrast there is some inconsistency in the selectivity pattern of Cluster 1 towards Cluster 2 and organizations of Cluster 3 for Cluster 4. These findings suggest the existence of differing degrees of cleavage among the different clusters.

One method of quantifying such observations is to develop a Selectivity Consistency Index. This method of evaluating selectivity

consistency can be used for two levels of determination; 1) within clusters and 2) between cluster selectivity consistency.

The Selectivity Consistency Index must first be calculated for each individual organization with all other organizations (820 comparisons). These individual organization Selectivity Consistency Indexes (SCI) can be appropriately combined to provide Cluster and inter-cluster Selectivity Consistency Indexes (CSCI).

The SCI for any two organizations (A and B) is defined as the number of organizations to which both A and B exhibit selectivity (as measured in Figure 2) in the same direction (N_{same}) divided by the number of organizations toward which both organizations exhibit selectivity regardless of direction ($N_{same} + N_{opposite}$). That is:

$$SCI_{AB} = \frac{N_{same}}{N_{same} + N_{opposite}}$$

Operationally, a SCI of 1.00 for organizations A and B means that both organizations have a deviation (positive or negative) from the theoretically expected distribution of linkages of one membership linkage. In other words they are maximally consistent in the directions of selectivity they exhibit for all other organizations. A score of zero means they are maximally inconsistent; under this condition, if A exhibits positive selectivity for C then B must exhibit negative selectivity for C.

The SCI's for every organization can be averaged by clusters to arrive at Cluster Selectivity Consistency Indexes (CSCI) for both

within and between cluster comparisons. First with respect to intra-cluster CSCI's, there is relatively high selectivity consistency among cluster organizations. Cluster 1 organizations are approximately 85% consistent in the direction of their selectivity for all organizations in the community (Table 3). Clusters 2 and 4 are similarly internally consistent while Cluster 3 has a somewhat lower CSCI (.71). The .51 value for the group of non-cluster organizations is almost precisely what is expected; since it is not a cluster it would be expected to have a relatively neutral CSCI.

Between cluster analysis (CSCI) indicates a more complicated situation. Clusters 1 and 2 are very similar in their consistency for all other clusters. They exhibit very strong inconsistency with Cluster 4 (.19 and .15) and moderate inconsistency with Cluster 3 (.32 and .34). The non-cluster organizations exhibit little if any consistency or inconsistency with any of the clusters. Clusters 3 and 4 are similarly neither consistent or inconsistent (.54) in their comparative selectivities.

(Table 3 about here)

Discussion

The data from this study indicated that voluntary associations within a community have membership overlap and are furthermore selective in their memberships forming natural groupings of associations. Four clusters of associations were identified in this community. One

Table 3. Cluster Selectivity Consistency Indexes (CSCI's) within and between clusters

Selectivity Cluster	Cluster Selectivity Consistency Index (CSCI)				
	Cluster 1	Cluster 2	Non-cluster Organizations	Cluster 3	Cluster 4
Cluster 1	.85	.79	.53	.32	.19
Cluster 2		.84	.51	.34	.15
Non-cluster Organizations			.51	.44	.45
Cluster 3				.71	.54
Cluster 4					.80

association (Woman's Club) was a member of three percentage clusters but was not included in any selectivity clusters. Woman's Club exhibited a pattern of relatively random selectivity toward cluster associations suggesting that it may be performing a mediating function among voluntary associations. By the same token many organizations exist almost completely outside the network of overlapping memberships and selectivity, and are thus relatively isolated.

The cleavages of interorganizational selectivity in Prairie City has revealed an underlying pattern of consistency in the preferential distribution of membership linkages. This pattern was obscured when analysis was limited to examination of percentage overlaps. Whether the existence of delineated selectivity clusters and the extent of within and between cluster consistency can be accounted for by underlying social factors is an important question for future research. Whether the implied lines of social cleavage have significance for community action also warrants research consideration.

It is of interest to note the existence of the WCTU (Women's Christian Temperance Union) and Country Club in clusters with very strong inconsistency in their selectivity patterns. This may suggest differences in the normative orientations or at least the ranges of acceptable behaviors for members of organizations to which they each exhibit considerable selectivity.

The potential utility of both percentage overlap analysis and the complementary selectivity analysis for making inter-community comparisons

should be apparent. The Selectivity Consistency Indexes and variations of it make possible the quantitative comparison of patterns of selectivity which are discrete and clusters that "attract" or "repel" one another are delineated. The functional meaning of the various magnitudes of the indexes must await further research and inter-community comparisons.

FOOTNOTES

2. A pseudonym

3. The benchmark characteristic of these organizations which led to the decision to include them in the study was the perceived influence of the respective churches (Methodist and Catholics) in the community. The Methodist church is generally perceived by informants as being the church with the most influence in the town; while the Catholic church is just as generally perceived as having little or no influence. In a study of the community power structure by Bohlen, et al. (1964) in which 25 individuals were delineated as being "influentials", 14 were members of the Methodist church as opposed to two which were members of the Catholic church. There are a few sectarian churches of less importance in the context of influence and social participation in the community than is the Catholic church; however the memberships of these churches are so small as to preclude their consideration as benchmarks.

4. Deviation values can be made quantitatively comparable by dividing the difference between the observed and theoretically expected values by the latter value.

5. Cluster two represents an unusual situation. The last four organizations to be added were equally qualified for inclusion, but inclusion of all four violated strict adherence to the criteria specified for identification of clusters. This cluster should probably be considered somewhat marginal in nature.

REFERENCES

Anderson, A.H. and Glen V. Vergeront
1948 Rural Communities and Organizations. Fargo: North Dakota Agriculture Experiment Station Research Bulletin 401.

Beal, George M., Paul Yarbrough, Gerald Klonglan and Joe M. Bohlen
1964 Social Action in Civil Defense. Ames: Department of Economics and Sociology, Rural Sociology Report 34.

Blau, Peter M. and Richard W. Scott
1962 Formal Organizations: a Comparative Approach. San Francisco: Chandler Publishing Company.

Bohlen, Joe M., George M. Beal, Gerald E. Klonglan and John L. Tait
1964 Community Power Structure and Civil Defense. Ames: Department of Economics and Sociology, Rural Sociology Report 35.

Bushee, Frederick A.
1945 "Social organization in a small city." American Journal of Sociology 51 (November): 217-226.

Coleman, James S.
1957 Community Conflict. Glencoe, Illinois: The Free Press.

Coser, Lewis
1956 The Functions of Social Conflict. Glencoe, Illinois: The Free Press.

Detroit Area Study of the University of Michigan
1952 A Social Profile of Detroit. Ann Arbor: University of Michigan Press.

Forsyth, E. and Leo Katz
1946 "A matrix approach to the analysis of sociometric data: preliminary report." Sociometry IX (November): 340-347.

Goodchilds, Jacqueline D. and John Harding
1960 "Formal organizations and informal activities." Journal of Social Issues XVI (Number 4): 16-28.

Gordon, C. Wayne and Nicholas Babchuk
1959 "A typology of voluntary associations." American Sociological Review 24 (February): 22-29.

Handlin, Oscar
1954 The American People in the Twentieth Century. Cambridge: Harvard University Press.

Hausknecht, Murry
1962 The Joiners. New York: Bedminister Press.

Hay, Donald G. and Robert A. Polson
1951 Rural Organizations in Oneida County, New York. Ithaca: Cornell Agricultural Experiment Station Bulletin 871.

Jehlik, Paul J. and Ray E. Wakeley
1949 Rural Organizations in Process. Ames: Iowa Agricultural Experiment Station Bulletin 365.

Katz, Leo
1947 "On the metric analysis of sociometric data". Sociometry 10 (August): 233-241.

Laskin, Richard
1962 Leadership of Voluntary Organizations in a Saskatchewan Town. Saskatoon: Mercury Printers Limited.

Miller, Paul A.
1953 Community Health Action. East Lansing: Michigan State College Press.

Moe, Edward O.
1959 "Consulting with a community system: a case study". Journal of Social Issues XV (Number 2): 29.

Pennock, J. Roland and John W. Chapman
1969 Voluntary Associations. New York: Atherton Press.

Riecken, Henry W., Jr. and Nathan L. Whetten
1948 Rural Social Organizations in Litchfield County, Connecticut. Storrs: Connecticut Experiment Station Research Bulletin 261.

Rose, Arnold
1954 Theory and Method in the Social Sciences. Minneapolis: University of Minnesota Press.

Rose, Arnold
1965 Sociology, the Study of Human Relations. 2nd Edition. New York, New York: Alfred A. Knoph, Inc.

Scott, John C.
1957 "Membership and participation in voluntary associations." American Sociological Review 22 (June): 315-326.

Smelser, Neal J.
1967 Sociology, an Introduction. New York: John Wiley Company.

Sower, Christopher, et al.
1957 Community Involvement. Glencoe: The Free Press.

de Tocqueville, Alexis
1945 Democracy in America, Vol. 1, and Vol. II. New York, New York: Vintage Books, Random House.

Warner, W. Keith and James S. Hilander
1964 "The relationship between size of organization and membership participation." Rural Sociology 29 (March): 30-39.

Warner, W. Lloyd and P.S. Lunt
1941 "The social life of a modern community." Vol. 1, Yankee City Series, New Haven.

Warriner, Charles K. and Jane Emery Prather
1965 "Four types of voluntary associations." Sociological Inquiry 35 (Spring): 138-148.

Wright, Charles R. and Herbert H. Hyman
1958 "Voluntary association memberships and American adults." American Sociological Review 23 (June): 284-294.

Young, Ruth C. and Olaf E. Larson
1965 "A new approach to community structure." American Sociological Review 30 (December): 926-934.

ERIC Clearinghouse
AUG 25 1971
on Adult Education